



NORTH AMERICAN PHILIPS CORPORATION

EXECUTIVE OFFICES

July 7, 1989

Mr. Kenneth Theisen
U.S. Environmental Protection Agency
ENGINEUITY INC
501 E. State Street
Albany, IN 47302

Dear Mr. Theisen:

Enclosed please find copies of the boring logs and analytical data for the Phase II sampling performed at the Selmer, Elkhart, Indiana facility.

The Phase II sampling was done in late May after my meeting with you and our discussion regarding the possibility of finding TCE in the soil in the swampy area behind the facility. During the time of sampling, we learned from former employees that the material which was allegedly disposed of behind the facility was still bottoms consisting of animal fat, rouge and trace amounts of TCE. This new information explained the reason why the analytical results show trace amounts of TCE as well.

Please note the following for the Phase II results. They are expressed in ppb and are the results obtained from a field GC. As you know, these results would be higher than those obtained if they were shipped to a lab because there would be no time lag resulting in volatilization. Samples 14-WS and 15-WS show non-detect levels. Boring S-1 was done because we had originally thought the TCE might have sunk since it was not found near the surface in the phase I or II sampling events. Boring S-1 shows that there is evidence of minor amounts of TCE. However, this is consistent with the minor amounts found in the vicinity of phase I boring 1.

NORTH AMERICAN PHILIPS CORPORATION

Note also that the concentrate in S-1 decreases at 25.5 feet because of a clay confining layer. The enclosed boring logs show the lithology of the soil in the area.

If you have any questions, please do not hesitate to call me.

Sincerely,



Ann C. Pizzorusso
Director
Environmental Affairs

100 EAST 42 STREET
NEW YORK, N Y 10017
PHONE (212) 697-3600

NORTH AMERICAN PHILIPS CORPORATION

EXECUTIVE OFFICES

July 6, 1989

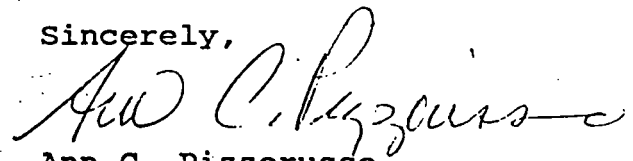
Mr. Charles McKinley
U.S. Environmental Protection Agency
111 West Jackson - 3rd floor
Chicago, IL 60604

Re: Selmer Company
Elkhart, IN

Dear Mr. McKinley:

Enclosed please find copies of the boring logs which you requested at our June 27, 1989 meeting. If you have any questions please do not hesitate to contact me.

Sincerely,

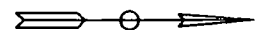


Ann C. Pizzorusso
Director
Environmental Affairs

cc: J. Barnett, EPA
R. Fields, Esq.
J. Kelly, Esq.
F. Phillips, Esq. DOJ
K. Theisen, EPA ✓





 NORTH

INDUSTRIAL DRIVE

#9 •

MAIN BUILDING
(MANUFACTURING FACILITY)

OFFICES

GRAB SAMPLE

#10 •
#14-WS •

#1 • #2 •
#7 • #8 • 1-S •
#3 • #4 • #5 •

SHED

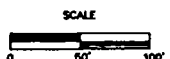
POND

#15-WS •

#13 •

#12 •

#11 •



1" = APPROX. 135'

SAMPLE LOCATION PLAN

• = APPROX. BORING/SAMPLE LOCATIONS

HERITAGE REMEDIATION/ENGINEERING INC.
(NORTH AMERICAL PHILIPS)
SELMER BAND INSTRUMENTS
ELKHART, IN

DA089058160 JFH5/18/89

DRILL METHOD: HSA
BY: HR/E

BORING: 1

DATE COMPLETED: 4-26-89

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

SAMPLING METHOD: CME
CONTINUOUS CORE SAMPLE
ELEVATIONS:
GROUND SURFACE: 0.000

EMS SAMPLE

OVA
0

122746

6-8

FILL - ASPHALT SURFACE 0-3",
DARK YELLOWISH BROWN SAND
(7-8', V DK GR BRN, SANDY LOAM)

122747

4-6

ORIGINAL - YELLOWISH BRN, MED
SAND, MOIST, LOOSE

DEPTH MEASURED IN FT FROM GROUND SURFACE

8.0

10.0

TOTAL DEPTH = 10.00

BORING PLUGGED WITH BENTONITE GRAVEL
AND CUTTINGS. CAPPED WITH ASPHALT PATCH.
AMBIENT OVA = 6-8ppm

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL

6-19-89
89058204

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 2

DATE COMPLETED: 4-26-89
SAMPLING METHOD: STANDARD
SPLIT SPOON
ELEVATIONS:
GROUND SURFACE: 0.000

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

EMS SAMPLE

OVA

EMS SAMPLE	OVA
122748	1' 9.4
	2' 5.6
	3'
	4' 4.0
	5' 3.8
122749	6'
	7'
	8' 4.4
	9' 3.8
	10' 5.0
122751	11' 5.0
	12'
	13'
	14' 4.2
	14.5'

FILL - ASPHALT SURFACE 0-4",
BROWN MED SAND, MOIST

ORIGINAL - YELLOWISH BROWN
SAND AND MED PEBBLES, MOD
SORTING, MOIST

DEPTH MEASURED IN FT FROM GROUND SURFACE

6.0

14.5

TOTAL DEPTH = 14.50

BORING PLUGGED WITH BENTONITE GRAVEL
AND CUTTINGS. CAPPED WITH ASPHALT PATCH.
AMBIENT OVA = 6-8ppm

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL

6-19-89
89058205

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 3

DATE COMPLETED: 4-26-89
SAMPLING METHOD: STANDARD

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

SPLIT SPOON

ELEVATIONS:

GROUND SURFACE: 0.000

EMS SAMPLE

OVA

122751

1' 4.2

2'

3' 4.2

4'

5' 4.2

6'

7' -

8' -

9'

FILL - DK BRN SANDY LOAM, MOIST

ORIGINAL - GR BRN CSE SAND
AND FN PEBBLES, MOIST-WET

GRAYISH BR, V CRS SAND AND
FN PEBBLES, WET

V DK GR BRN, SAND AND PEBBLES,
10% SILT, WET

DEPTH MEASURED IN FT FROM GROUND SURFACE

3.5

6.0

7.5

9.0

TOTAL DEPTH = 9.00

BORING PLUGGED WITH BENTONITE GRAVEL
AND CUTTINGS. CAPPED WITH ASPHALT PATCH.
WET @ 5.5'
AMBIENT OVA = 4.2ppm

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL

6-19-89
89058206

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 4

DATE COMPLETED: 4-26-89
SAMPLING METHOD: STANDARD

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

SPLIT SPOON
ELEVATIONS:

GROUND SURFACE: 0.000

EMS SAMPLE

HNu

1' 0.0
2' 0.0
3' 0.0
4' 0.0
122752 5' 0.0
6' 0.0
7' -
8' -
9' -

FILL - V DK BRN SANDY LOAM,
MOIST, DISCOLORED?

ORIGINAL - YELLOWISH BRN
MED-CSE SAND, MOIST-WET

BROWN FN PEBBLES AND V CSE
SAND, WET

DEPTH MEASURED IN FT FROM GROUND SURFACE

3.5

7.0

9.0

TOTAL DEPTH = 9.00

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS
WET @ 7.5'
AMBIENT HNu - ZEROED OUT

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL

6-19-89
89058207

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 5

DATE COMPLETED: 4-26-89

SAMPLING METHOD: STANDARD

SELMER BAND INSTRUMENTS

SPLIT SPOON/GRAB

500 INDUSTRIAL PKWY

ELEVATIONS:

COUNTY: ELKHART

GROUND SURFACE: 0.000

STATE: INDIANA

EMS SAMPLE

122753

1' -
ODOR
NOTED

3'

4'

5'

6'

7'

122754

8'

8.5'

LOGGED FROM AUGER CUTTINGS
0-7.0' BRN MED SAND RETURNS.
SLIGHT ODOR .5-1.5', OVA METER
NOT OPERATING PROPERLY-LOW
BATTERIES

BRN FN PEBBLES AND CSE SAND,
WET

DEPTH MEASURED IN FT FROM GROUND SURFACE

7.0

8.5

TOTAL DEPTH = 8.50

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.
* METERS DOWN; NO READINGS
WET @ ~7.5'

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL

6-19-89
89058208

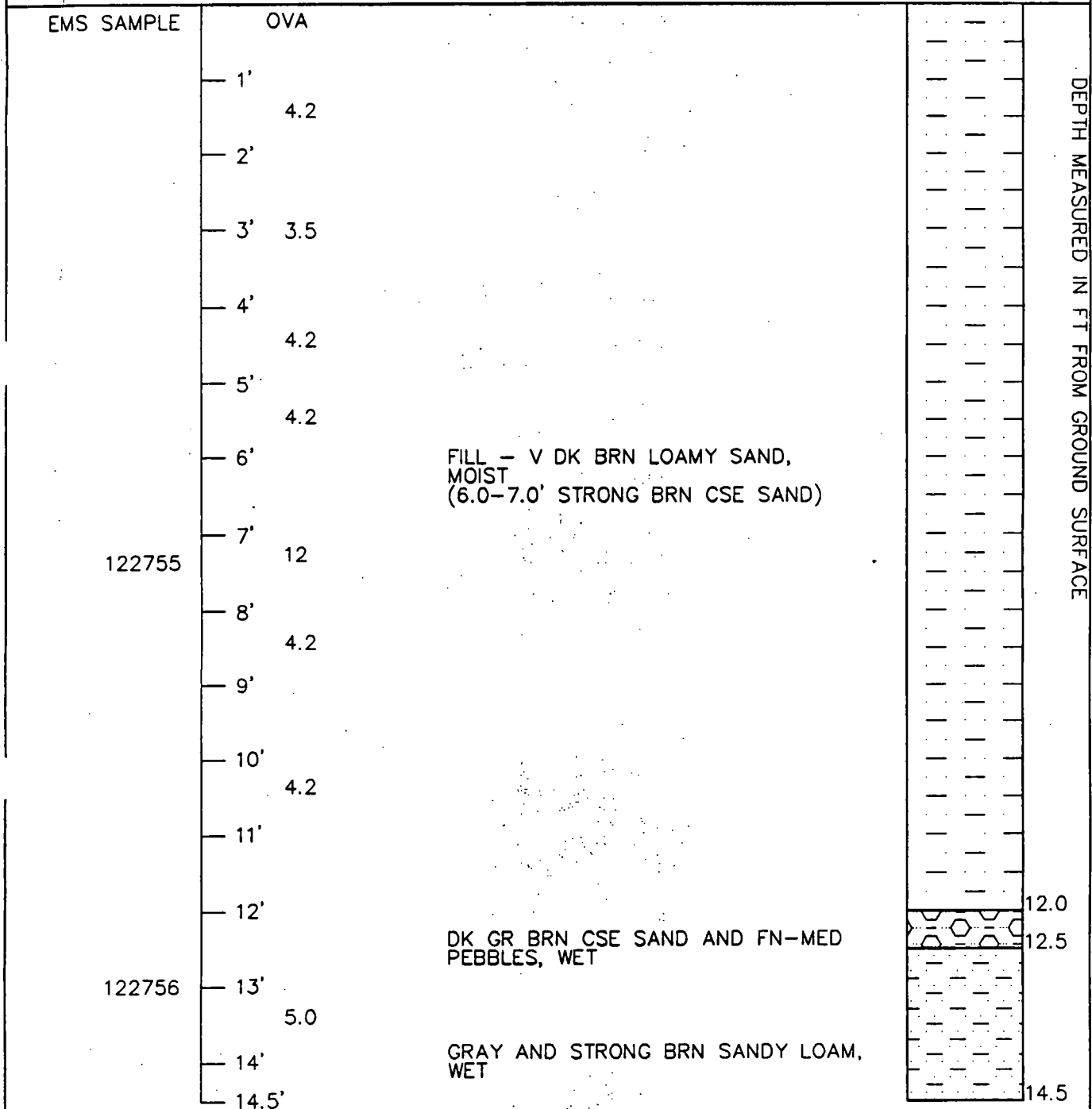
PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 6

DATE COMPLETED: 4-27-89
SAMPLING METHOD: STANDARD
SPLIT SPOON
ELEVATIONS:
GROUND SURFACE: 0.000

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA



TOTAL DEPTH = 14.50

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.

AMBIENT OVA = 3.5-4.2ppm

WET @ 12.0'

HERITAGE REMEDIATION/ENGINEERING, INC.

GEOLOGIST: D. OPELL

6-19-89
89058209

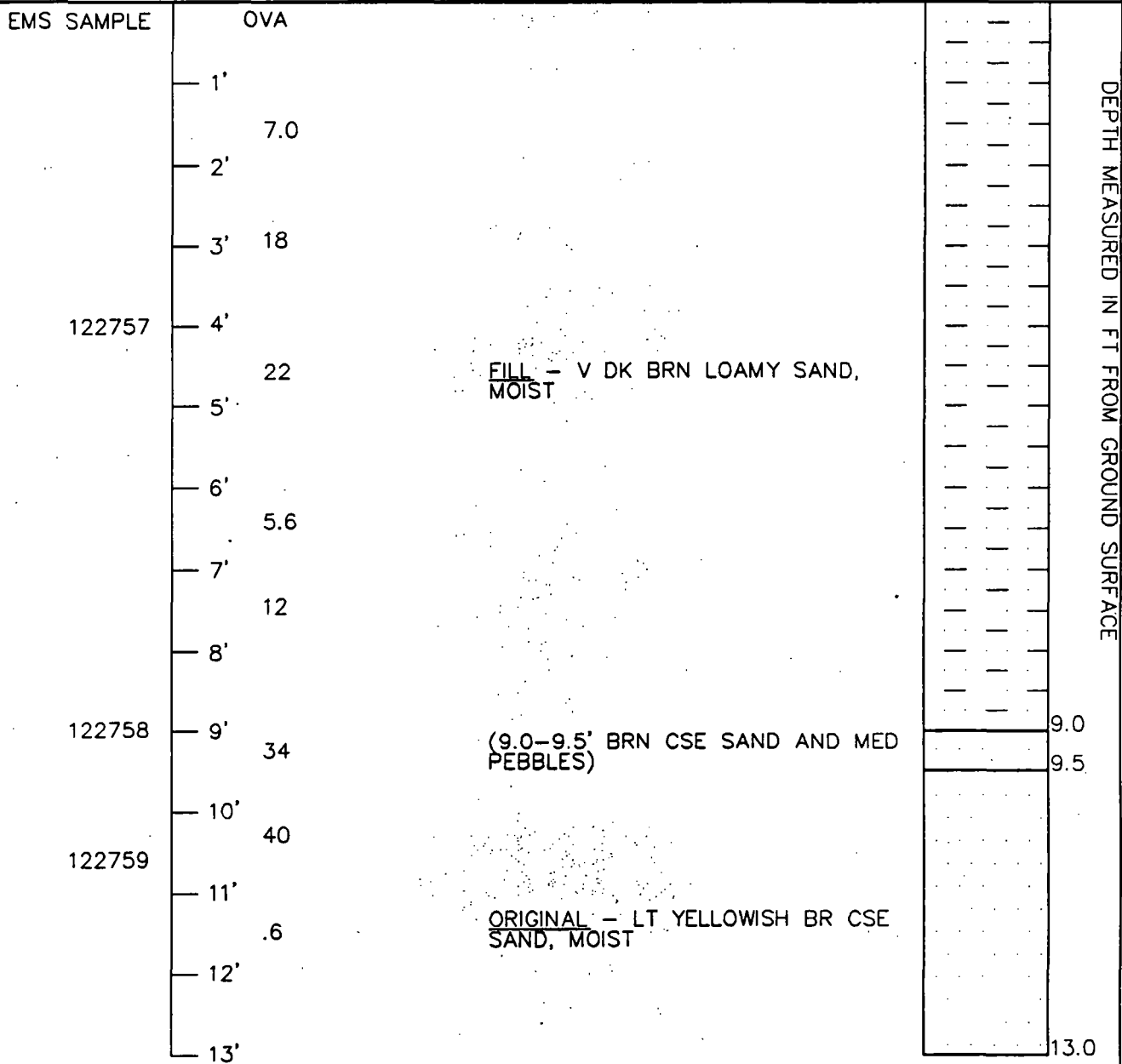
PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 7

DATE COMPLETED: 4-27-89
SAMPLING METHOD: STANDARD
SPLIT SPOON
ELEVATIONS:
GROUND SURFACE: 0.000

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA



TOTAL DEPTH = 13.00

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.
ALL DRILLING EQUIPMENT AND SPLIT SPOONS STEAM
CLEANED BETWEEN SAMPLES AFTER 3' DEPTH.
WET @ 12.0'
AMBIENT OVA = 4.2ppm

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL
6-19-89
89058210

DRILL METHOD: HSA
BY: HR/E

BORING: 8

DATE COMPLETED: 4-27-89
SAMPLING METHOD: STANDARD

SELMER BAND INSTRUMENTS SPLIT SPOON

500 INDUSTRIAL PKWY

ELEVATIONS:

COUNTY: ELKHART

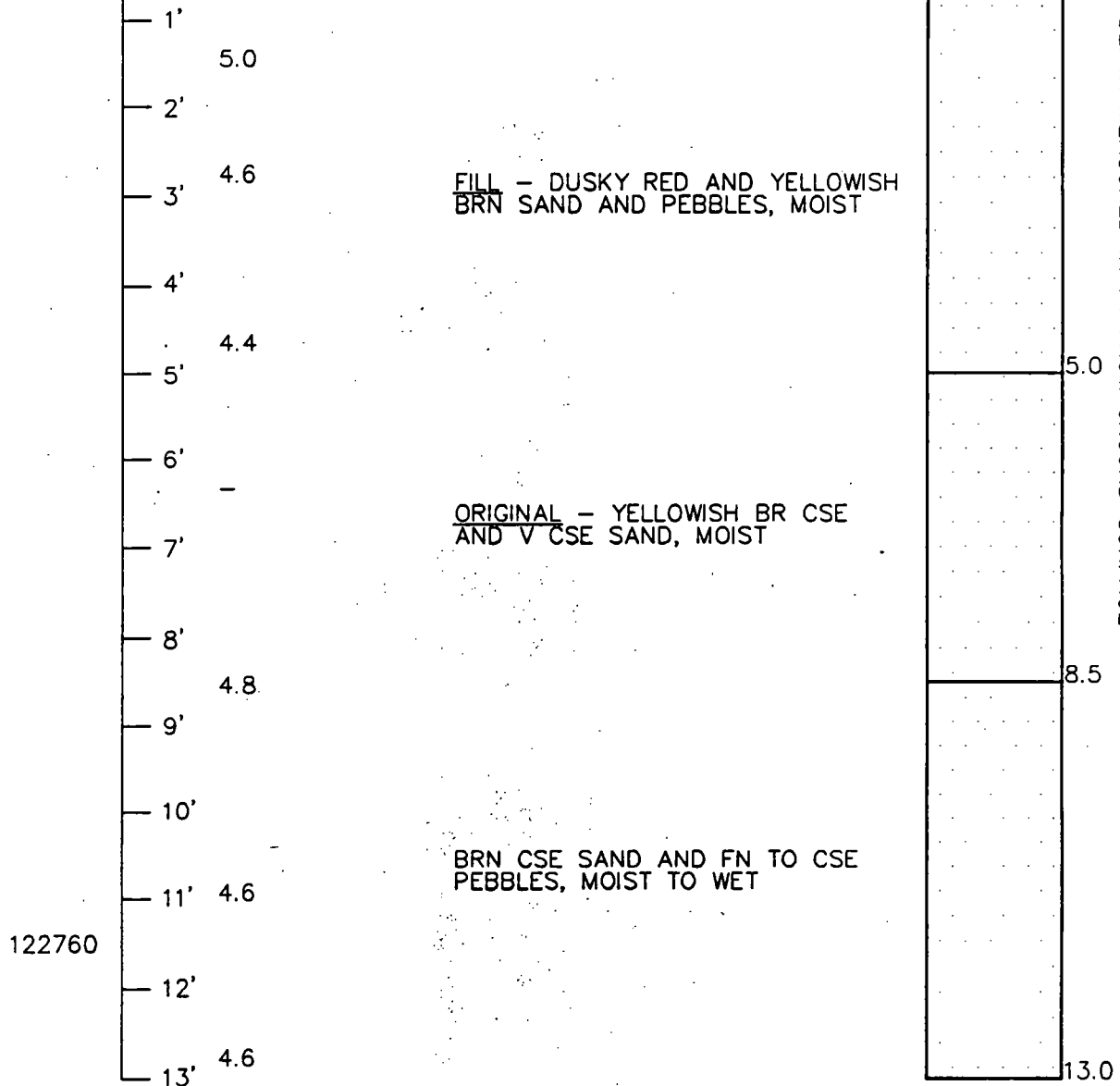
GROUND SURFACE: 0.000

STATE: INDIANA

EMS SAMPLE

OVA

DEPTH MEASURED IN FT FROM GROUND SURFACE



TOTAL DEPTH = 13.00

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.

AMBIENT OVA = 5.0ppm

WET @ 11.9'

HERITAGE REMEDIATION/ENGINEERING, INC.

GEOLOGIST: D. OPELL

6-19-89
89058211

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 9
SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

DATE COMPLETED: 4-27-89
SAMPLING METHOD: STANDARD
SPLIT SPOON
ELEVATIONS:
GROUND SURFACE: 0.000

EMS SAMPLE

OVA

EMS SAMPLE	OVA
	1'
	2'
	3'
	4'
	5' 4.2
122761	6'
	7' 4.0
	8'
	9' 4.0
	10' 4.0
122762	11' 4.0
	12'
	12.5'

YELLOWISH BROWN MED TO V CSE
SAND, MOIST

LIGHT YELLOWISH BRN CSE SAND
AND FN PEBBLES, MOIST

DEPTH MEASURED IN FT FROM GROUND SURFACE

10.5

12.5

TOTAL DEPTH = 12.50

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.
AMBIENT OVA = 4.2ppm
WET @ 11.5'

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL
6-19-89
89058212

PAGE 1

DRILL METHOD: HSA
BY: HR/E

BORING: 10

DATE COMPLETED: 4-27-89
SAMPLING METHOD: STANDARD
SPLIT SPOON
ELEVATIONS:
GROUND SURFACE: 0.000

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

EMS SAMPLE

OVA

122763

1'

4.4

V DK BRN LOAMY SAND, ROOTS TO
2.5', MOIST-WET

2'

122764

3'

4.6

GRAYISH BRN MED-CSE SAND, WET

4'

DEPTH MEASURED IN FT FROM GROUND SURFACE

TOTAL DEPTH = 4.00

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS.
AMBIENT OVA = 4.4ppm
WET @ 2.8'

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL
6-19-89
89058213

PAGE 1

DRILL METHOD: RHSA
BY: HR/E

BORING: 11

DATE COMPLETED: 5-31-89

SAMPLING METHOD: SPLIT SPOON

SELMER BAND INSTRUMENTS

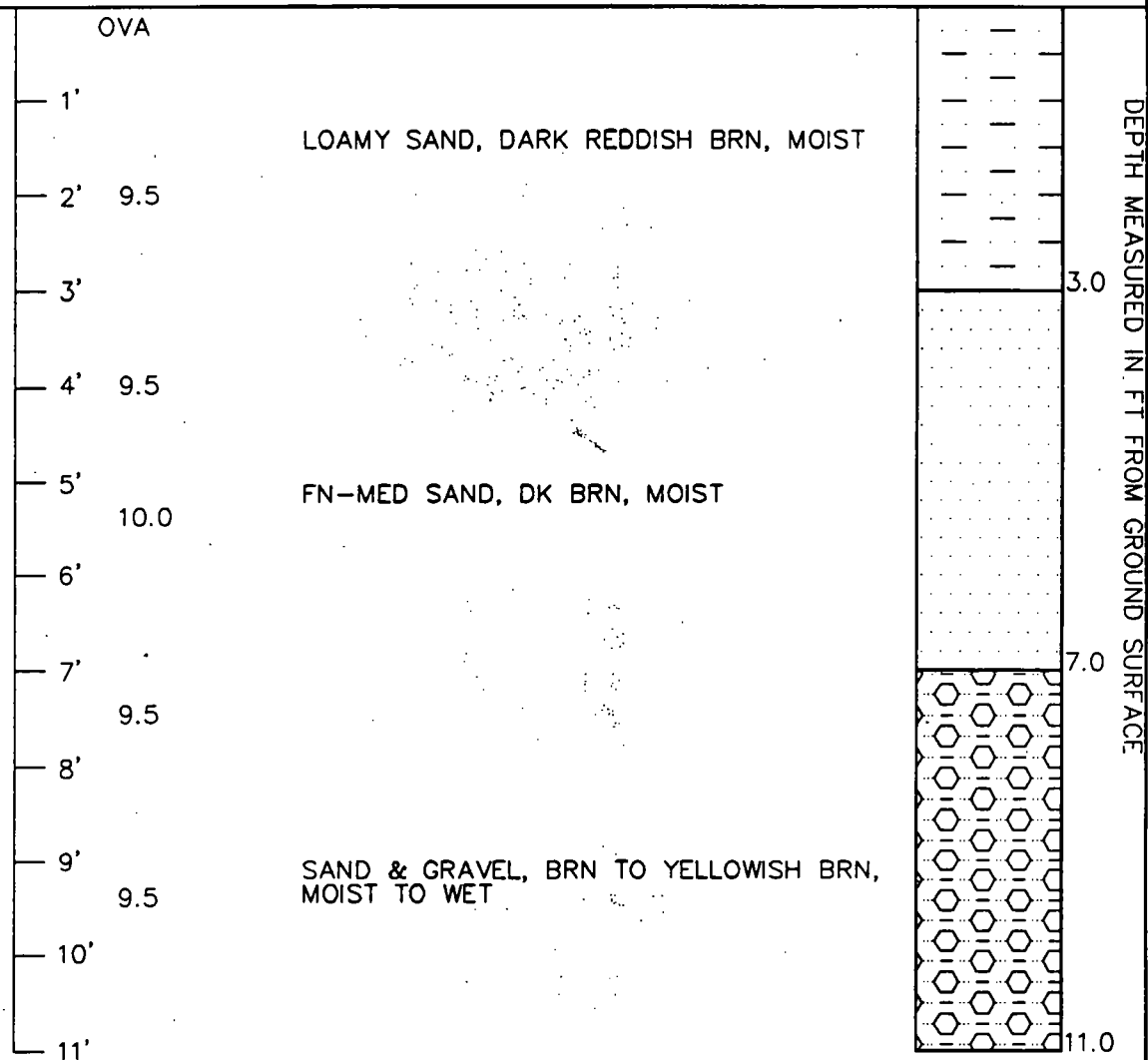
ELEVATIONS:

500 INDUSTRIAL PKWY

GROUND SURFACE: 0.000

COUNTY: ELKHART

STATE: INDIANA



TOTAL DEPTH = 11.00

WEATHER - RAIN; AMBIENT OVA 8-10ppm
BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS
WET AT 9.5'

HERITAGE REMEDIATION/ENGINEERING, INC.

GEOLOGIST: D. OPELL

7-3-89
89058228

PAGE 1

DRILL METHOD: RHSA
BY: HR/E

BORING: 12

DATE COMPLETED: 5-31-89

SAMPLING METHOD: SPLIT SPOON

SELMER BAND INSTRUMENTS

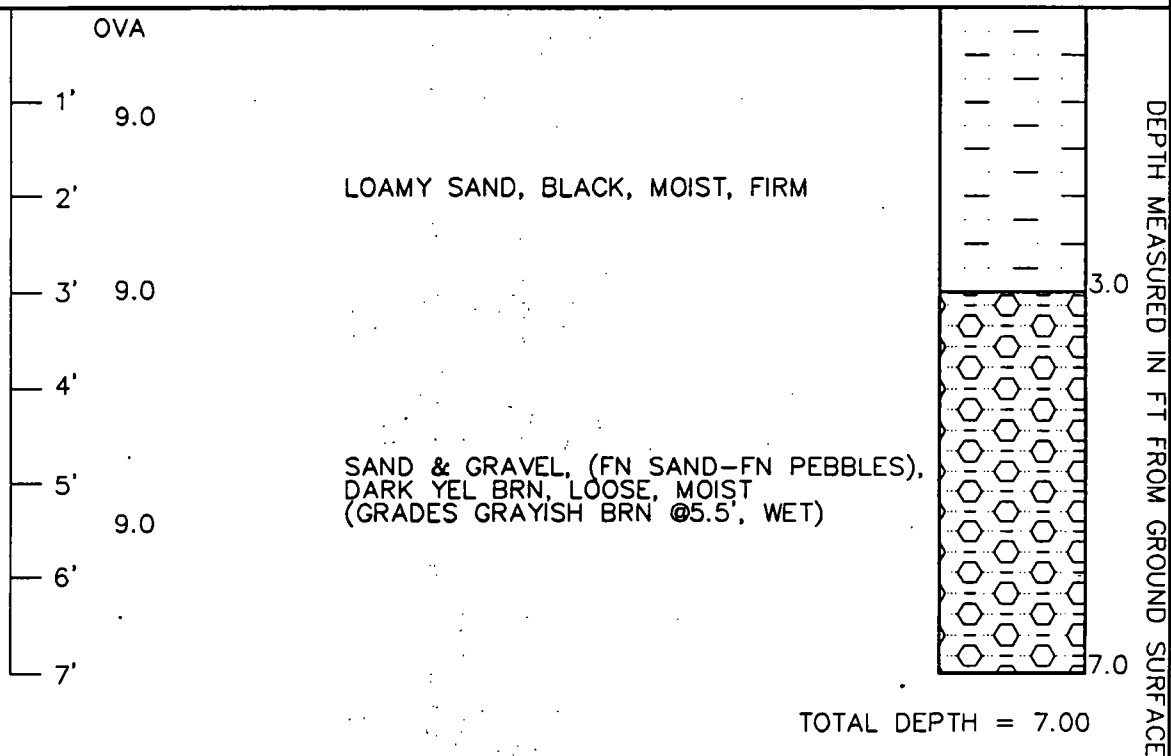
ELEVATIONS:

500 INDUSTRIAL PKWY

GROUND SURFACE: 0.000

COUNTY: ELKHART

STATE: INDIANA



WEATHER: RAIN; AMBIENT OVA 8-10ppm
BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS
WET @ 5.5'

DRILL METHOD: RHSA
BY: HR/E

BORING: 13

DATE COMPLETED: 5-31-89

SAMPLING METHOD: SPLIT SPOON

SELMER BAND INSTRUMENTS

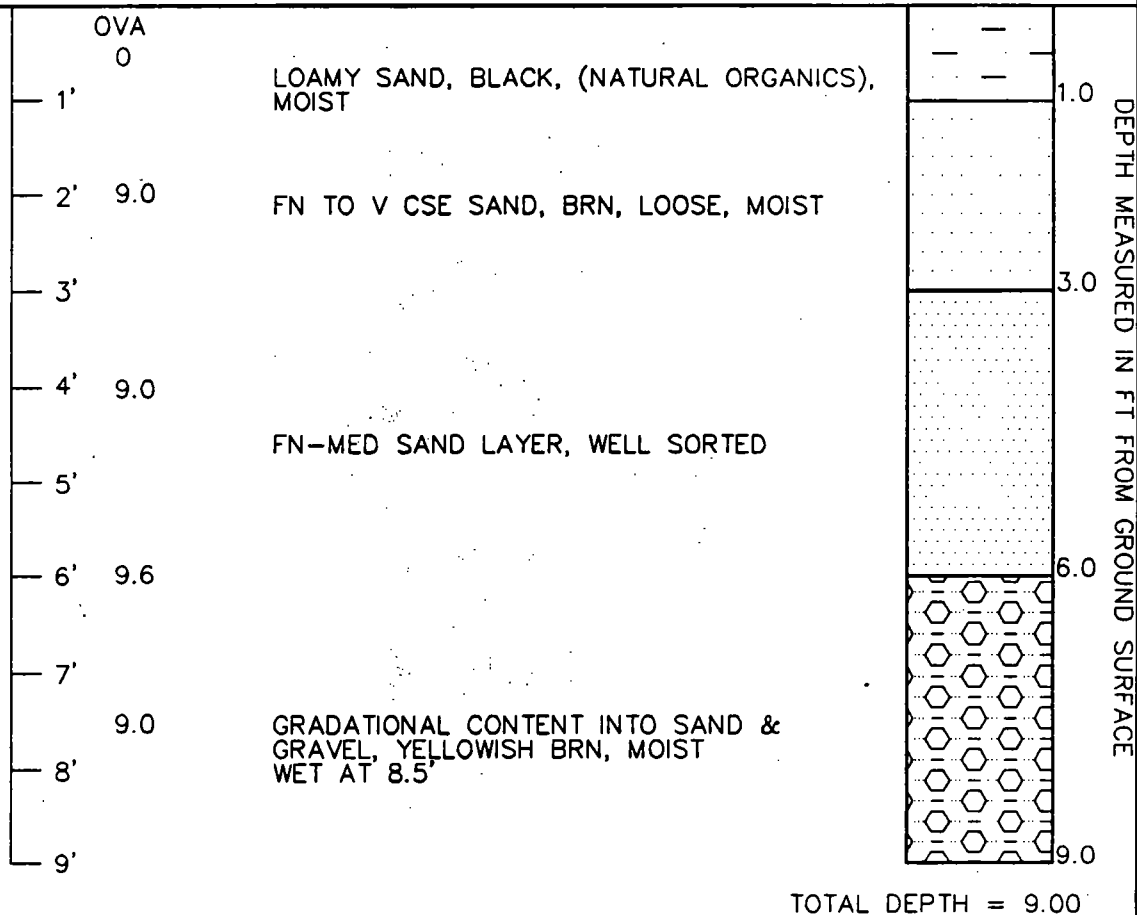
ELEVATIONS:

500 INDUSTRIAL PKWY

GROUND SURFACE: 0.000

COUNTY: ELKHART

STATE: INDIANA



WEATHER: RAIN; AMBIENT OVA 8-10ppm
BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS
WET @ 8.5'

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: D. OPELL
7-3-89
89058230

DRILL METHOD: HSA BORING: 14-WS
(PLUG IN BASE OF AUGERS)
BY: HR/E

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

DATE COMPLETED: 6-1-89
SAMPLING METHOD: TEMPORARY WELL
INSTALLED THROUGH AUGERS
ELEVATIONS:
GROUND SURFACE: 0.000

GC SAMPLE

CLAY, BLACK, WITH FN GRAVEL, WET
(WET AT 1.0')

3.0

DEPTH MEASURED IN FT FROM GROUND SURFACE

14-WS (15') — 15'

SAND AND GRAVEL, GRAY, WET

28.0

30.0

STIFF DRILLING — CONFINING UNIT
(GRAY SANDY CLAY ON AUGER BIT)

14-WS (28') — 30'

TOTAL DEPTH = 30.00

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: R. MYERS
7-3-89
89058231

PAGE 1

DRILL METHOD: HSA BORING: 15-WS
(PLUG IN BASE OF AUGERS)

BY: HR/E

SELMER BAND INSTRUMENTS

500 INDUSTRIAL PKWY

COUNTY: ELKHART

STATE: INDIANA

DATE COMPLETED: 6-1-89

SAMPLING METHOD: TEMPORARY

WELL INSTALLED THROUGH AUGERS

ELEVATIONS:

GROUND SURFACE: 0.000

GC SAMPLE

LOOSE SANDY CLAY, BLACK, MOIST-WET
(WET AT 2.0')

BROWN FN-MED SAND WITH GRAVEL, WET
(HEAVING SANDS)

STIFF DRILING - CONFINING UNIT
(GRAY SANDY CLAY)

DEPTH MEASURED IN FT FROM GROUND SURFACE

3.0

26.0
26.5

15-WS (26') — 26.5'

TOTAL DEPTH = 26.50

BORING PLUGGED WITH BENTONITE GRAVEL AND CUTTINGS

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: R. MYERS

7-3-89
89058232

PAGE 1

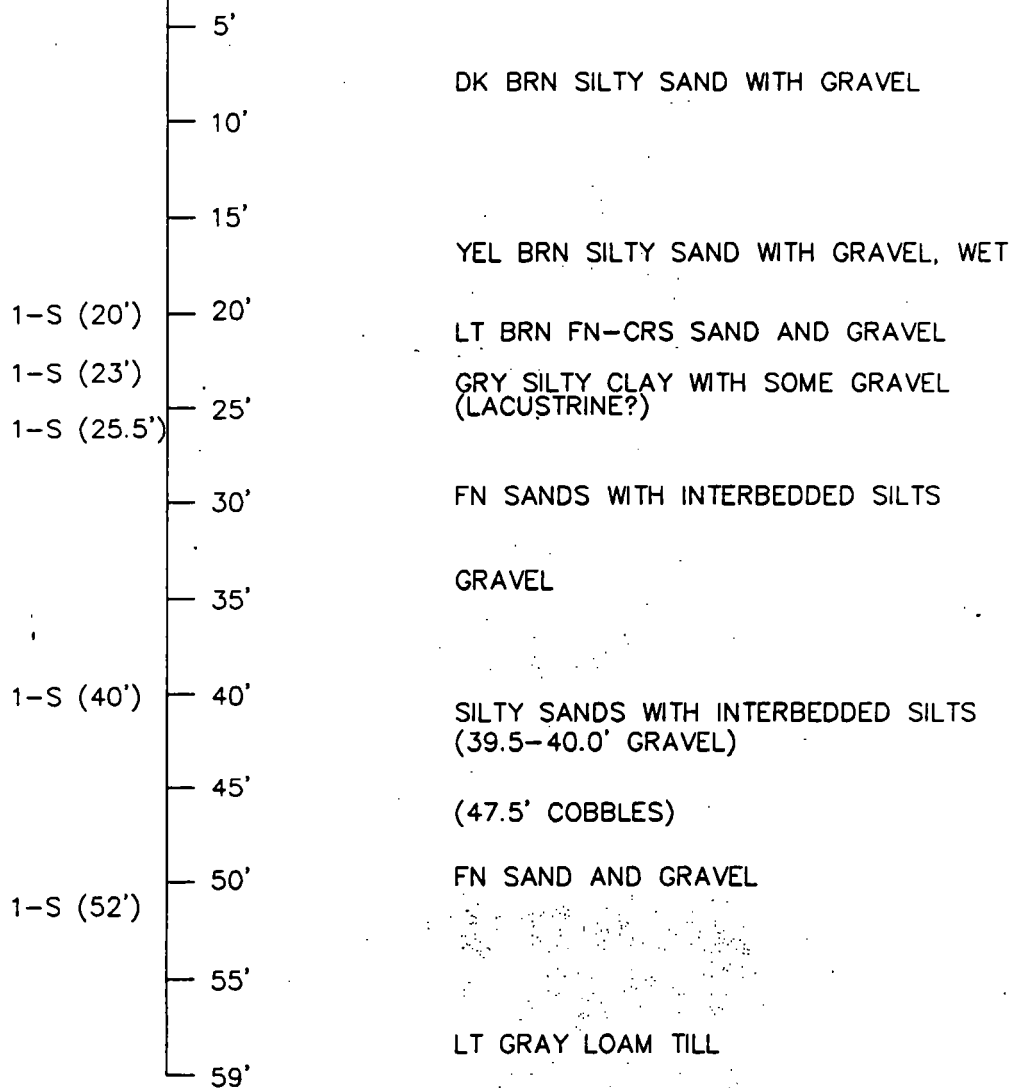
DRILL METHOD: RHSA/
SLOTTED AUGER
BY: KECK

BORING: 1-S

SELMER BAND INSTRUMENTS
500 INDUSTRIAL PKWY
COUNTY: ELKHART
STATE: INDIANA

DATE COMPLETED: 5-31-89/6-2-89
SAMPLING METHOD: STANDARD SPLIT
SPOON/AUGER RETURNS/TEFLON
BAILER (H₂O)
ELEVATIONS:
GROUND SURFACE: 0.000

GC SAMPLE



TOTAL DEPTH = 59.0

BORING PLUGGED BY TREMIED BENTONITE SLURRY GROUT
9.6#/GAL AND DRY BENTONITE ON TOP OF BOREHOLE AFTER
SETTLEMENT ON 6/2/89.
WEATHER: RAIN & SEVERAL THUNDERSTORMS 5-31-89/6-2-89

HERITAGE REMEDIATION/ENGINEERING, INC.
GEOLOGIST: A. VINCENT
7-3-89
89058233

PAGE 1

PHASE II INVESTIGATION GROUND-WATER ANALYSES

SELMER BAND INSTRUMENTS

Portable GC - Results*

Parameter/Location	Boring S-1					14-WS		15-WS	Det Limit
	20'	23'	25.5'	40'	52'	15'	28'	26'	
1,1-Dichloroethylene	<1	1	ND	<1	6	ND	ND	ND	1
Trans-1,2 Dichloroethylene	1	ND	<1	<1	ND	ND	ND	ND	1
Benzene	12	1	<1	<1	ND	ND	ND	ND	1
Trichloroethylene	233	531	12	161	29	<1	<1	3	1
Toluene	22	5	1	ND	1	ND	ND	ND	1
Tetrachloroethylene	22	25	1	ND	1	ND	ND	4	1
Ethyl Benzene	1	<1	<1	ND	ND	ND	ND	ND	1
Total Xylenes	7	3	2	ND	ND	ND	ND	ND	3

* Analyses conducted by Keck Environmental Consultants, all concentrations reported as ug/l (ppb)
Instrument - HNU-321 GC/PID, Headspace analysis for chlorinated and aromatic volatile organics

RC/ 3V:K23C 100 E 42 ST NYC : 6-16-89 : 14:05 :HR/E INDY

TELEX/FAX DEPT. : # 2